M2 ENTERPRISES
PRESENTS OUR
2 METER ANTENNAS

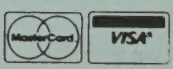
LEADING EDGE DESIGNS

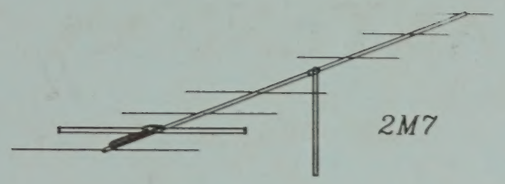
3 DECADES OF EXPERIENCE

FEATURING
CUSTOM TUNING
EASY ASSEMBLY
RUGGED DESIGNS
TECHNICAL BACKUP

M2 ENTERPRISES
7560 N. Del Mar
Fresno, CA 93711-6856

(209) 432-8873 FAX (209) 432-3059





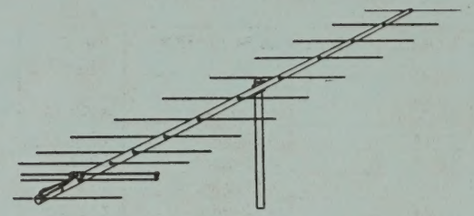
2M7

SPECIFICATIONS

Model number	2M7
Frequency	144-148 mHz
Gain	10.3 dBd
Front to back	20 dB
VSWR	1.3:1
Beam width	46 & 54 degrees
Feed impedance	50 Ohms
Connector	SO-239
Power handling	1 KW
Boom length/dia	106"/1.0"
Number of elements	7
Mast size/mounting	up to 2"/H or V
Wind area	.74 sq. ft.
Weight	4 lbs
Shipping weight	6 lbs. (UPS ok)

FEATURES

The 2M7 is a computer optimized yagi that will outperform longer old design antennas. The 2M7 covers the whole band with only slight performance degradation at the band edges. Side lobes are very low and it is perfect for stacking 2 or more. Its light weight and durability make it great for portable hill topping.



2M12

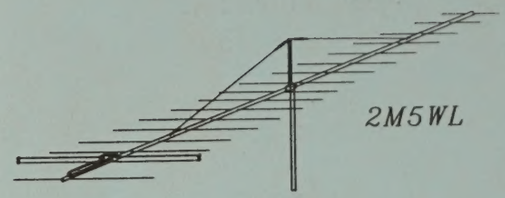
SPECIFICATIONS

Model Number	2M12
Frequency	144 to 148 mHz
Gain	13.0 dBd
Front to back	25 dB for full 180 degrees
Beamwidth E and H	32 and 36 degrees
First sidelobe	-20 E -17 H plane
Connector	N Female
Power handling	1500 Watts
Stacking distance	10 feet
Boom length	234 inches / 19.5 ft.
Mounting	Vertical or Horizontal
Wind Load1	1.5 SQ. ft
Weight	8 Lbs
Shipping weigh	9 lbs
Shipping size	2.5 X 4.5 X 60.5 (UPS ok)

FEATURES

The 2M12 features the latest computer techniques for optimization of pattern and gain versus bandwidth. Clean patterns allow you to hear more and interfere less. Clean patterns are essential for stacking. The 2M12 is ideal for stacking in either polarization. Two 2M12's side by side vertically polarized is a dynamite FM DX package and 4 or more are perfect for long haul tropo Dxing or moonbounce.

Structurally the 2M12 is sturdy and clean requiring no boom support. Elements are aluminum rod, 6061-T6 and the boom is a full 1-1/2 inch diameter in the middle tapering through two 1-1/4 inch sections to stiff 1 inch tips. Of course the 2M12 also features the same machined driven element housing and 'O' Ring sealed connectors used on all M^2 antennas.



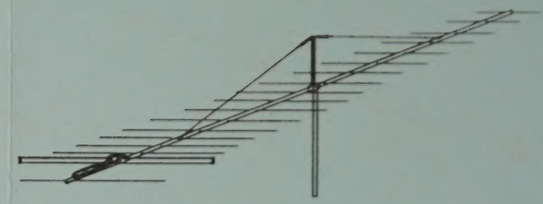
2M5WL

SPECIFICATIONS

Frequency gain @	144 mHz	15.0 dBd
	146 mHz	14.8 dBd
	147 mHz	14.3 dBd
	148 mHz	14.5 dBd
F/B ratio		22 dBd typical
Beamwidth		E-26, H-29
Stacking distance		13'6" horiz., 12'6" vertical
Feed impedance		50 Ohms, balanced
Input connector		'N' female
VSWR		1.2:1 or btr @ 144 mHz
Power handling		1.5 KW
Balun		4:1 (included)
Boom length		33 feet. (5 wavelength)
Boom diameter		Tapered,1.5",1.25",1"& 3/4"
Driven element type		Folded dipole, modified
Parasitic elements		3/16" rod
Element count		17
Wind area		2.7 sq. ft.
Turning radius		18' 9"
Mounting		Horizontal or vertical
Mast size		1 1/2" to 2-1/8"
Boom support		18" vert. member & dacron
Weight		12.8 lbs.
Shipping weight		14 lbs UPS ok

FEATURES

The 2M-5WL is designed with the SERIOUS DXer in mind. It provides maximum gain for minum weight and windload yet is strong enough to survive100 mph winds. The driven element is also unique as its center is machined from a block of aluminum and fitted with 'O' rings connectors* and access cap. After factory assembly, the housing is filled with a space age silicon material which further seals and increases dielectric breakdown and arc over protection. This antenna is widely used in EME and large Troposcatter array.



2M-18XXX

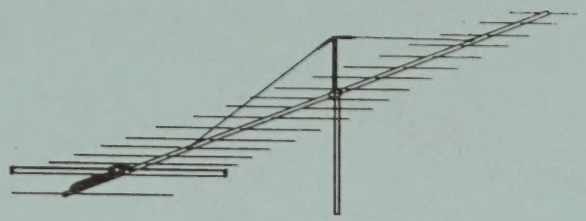
SPECIFICATIONS

Frequency range	144-148 mHz
Peak gain	15.3 dBd
Front to back	25 db
Beamwidth E-plane	25 degrees
Beamwidth H plane	30 degrees
First side lobe E and H	-17 and -15 db
Stacking distance	14' wide, 13' high
Feed impedance	50 Ohms nominal
VSWR	1.2:1
Input connector	'N' female
Driven element type	Folded dipole
Balun	1/2 wave 4:1
Power handling	1.5 KW
Boom length	36' 3" 5.3WL
Wind load	2.9 sq ft.
Weight	14lbs
Shipping weight of kit	15 lbs (UPS ok)

FEATURES

The new 18XXX has been extensively range tested and features more peak gain where you want it., better sidelobes and better front to back than any other antenna on the market.

Mechanically M2 has integrated it's proven sealed driven element design with the 18XXX design. A solid aluminum machined, alodined housing features 'O' rings sealing all three connectors on the housing and 'N' connector with it's berylium copper, gold plated center pin assures lowest loss possible. Factor assembled, the driven, element housing is finally encapsulated in a space age silicon gel that seals out moisture and increases the dielectric strength over three times that of air. Years and years of trouble fee top performance was the goal when this design was originally conceived.



18XXX MODIFICATION KIT FOR THE KLM 2M-16LBX

SPECIFICATIONS

Frequency range	144-146 mHz
Peak gain	15.3 dBd
Front to back	25 db
Beamwidth E-plane	25 degrees
Beamwidth H-plane	30 degrees
First side lobe E and H	-17 and -15 db
Stacking distance.	14' wide, 13' high
Feed impedance	50 Ohms nominal
VSWR	1.2:1
Input connector	'N' female
Driven element type	Folded dipole
Balun	1/2 wave 4:1
Power handling	1.5 KW
Boom length	36'3" 5.3WL
Wind load	2.6 sq ft.
Shipping weight of kit	5.0 lbs. (UPS ok)

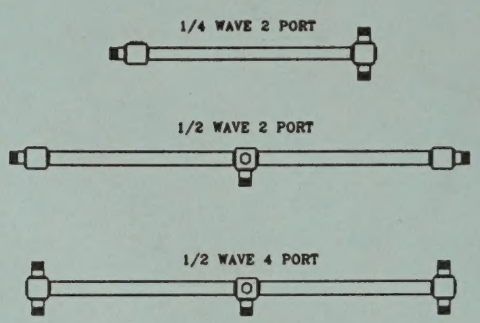
FEATURES

This kit structurally and electrically upgrades the very popular KLM 2M-16LBX yagi. A new 1-1/2 X 60" boom section is added to the mid section and a 3/4 X44.5" tip section is added as well. Additional elements are provided as well as the totally sealed M2 driven element assembly with a built in 'N' connector. Boom length is extended 8 feet and the gain is raised a full dB. VSWR across the band is also improved.

This kit was designed to introduce M^2 design quality to KLM customers.

After modification this antenna matches the M^2 2M18XXX exactly in size and performance and the two antennas can be used together in an array with amazing results.

POWER DIVIDERS



These power dividers, used with standard 50 Ohm cable, do the impedance matching required when feeding 2 or more antennas.

M2 power dividers are made of round aluminum tubing welded into machined aluminum junction blocks. 'N' female connectors are threaded in and sealed with 'O' rings. Teflon discs support the copper center conductor. Threaded, 'O' ringed access covers allow inspection or repair should it ever be required.

The two port dividers are either quarterwave or half wave long. The four, six and eight way dividers are half wave. Of course we can usually do special impedance conversions as well; such as 75 Ohm versions of the above and 75 t o 50 Ohm versions.

The following are made in both 50 and 75 Ohm versions for 144 and 432 mHz. For 50 mHz only
The two port versions available
TWO PORT QUARTERWAVE DIVIDER
FOUR PORT HALF WAVE DIVIDER
SIX PORT HALF WAVE DIVIDER
EIGHT PORT HALF WAVE DIVIDER
SPECIALS

M^2 ENTERPRISES
PRODUCT PRICE LIST

7560 N. DEL MAR
FRESNO, CA 93711
PH (209) 432-8873 FAX (209) 432 3059

MODEL NUMBER	DESCRIPTION	SUG. RETAIL
	HF	
10-30LPY	10-30 mHz	$899.00
20M4	4 Element	$649.00
18M3	3 Element	$249.00
15M4	4 Element	$369.00
10M4	4 Element	$169.00
10M7	7 Element	$499.00
	6 METERS	
6M5	5 Element	$149.00
6M7	7 Element	$229.00
6M2WL	9 Element	$379.00
6M2.5WL	11 Element	$449.00
	2 METERS	
EB-144	HORIZ- OMNI	$119.00
2M7	7 Element	$105.00
2M12	12 Element	$129.00
2M5WL	17 Element	$169.00
2M18XXX	18 Element	$219.00
2M18XXXkit	KLM Conv. Kit	$ 69.00
2MCP14	14 Element Circ.	$149.00
2MCP22	22 Element Circ.	$225.00
2M6WLHD	19 Element HD	$379.00
2M5-440XP	5 Ele /10 ELe on 440	$149.00
	220	
220-7WL	23 Element	$189.00
	70 CM	
EB-432	Horiz Omni	$109.00
420-50-11	11 Ele full band	$ 99.00
440-18	Multi- Use	$109.00
436-30CP	30 Ele OSCAR	$229.00
432-9WL	28 Element	$149.00
432-13WL	39 Element	$229.00
MT-3000	Elev. Rotor HD	$569.00
MT-4000	Elev Rotor XHD	$899.00
ORION	AZ Rotor XHD	$899.00
	ACCESSORIES	
6M 2 port	2 WY 1/4 WV PD	$ 79.00
2M 2 PORT	2 WY 1/4 WV PD	$ 59.00
2M 4 PORT	4 WY PWR DIV	$ 79.00
70CM 2 PORT	2 WY PWR DIV	$ 59.00
70CM 4 PORT	4 WY PWR DIV	$ 69.00
VHF-50	'N' CONN PH CB	$ 39.00
UHF-50	'N' CONN PH CB	$ 35.00